ON SOME NECESSARY ALTERATIONS IN THE NOMENCLATURE OF BIRDS.

By GREGORY M. MATHEWS.

Since the publication of my *Handlist*, less than three years ago, I have noted many alterations in the nomenclature there accepted. As stated in the preface, I followed the *Handlist of Birds in the British Museum*, which was then nearing completion. That work, however, regarded the XIIth Edition of Linne's *Systema Naturae* as the commencing point of binomial nomenclature, whereas it is now generally accepted that the year 1758 and the Xth Edition of Linne's *Systema Naturae* shall mark that inauguration. It seems only a matter of time before British ornithologists fall in line with the rest of the scientific world, and I have therefore resolved to conform to the laws formulated by the International Zoological Congresses, and recognize 1758 as the starting-point.

Recognition of the laws proposed in the International Code on Zoological Nomenclature prohibits the adoption of names introduced in works in which the principles of binomial nomenclature are not applied. The law on this matter, otherwise strictly enforced, has been contravened with regard to the "Brissonian genera." Brisson was a non-binomial writer, yet many of the generic names met with in his work have been utilized as if correctly introduced. I cannot accept any, and the provision of substitutes has sometimes been a difficult task. I have constantly referred to C. Davies Sherborn's admirable work, the Index Animalium, and have continually had to regret the admission of the "Brissonian genera" into that most valuable compilation. If they had been omitted or even recognized as of only historical interest my task would have indeed been much lighter. As it is I can only state that the accuracy of Mr. Sherborn's work is most remarkable. Only those who have been engaged in nomenclatorial research can gauge the tremendons amount of work that has been expended in the production of such a publication. In proposing the names to be adopted in place of the ones at present illegally in vogue "ex Brisson" I cannot claim that all such introductions are final, and only offer them and invite criticism so that by co-operation finality may be earlier attained. In order that this purpose may be soon achieved 1 am attaching a list of names which seem to need alteration, having no connection with Australian ornithology, but which have cropped up whilst I was endeavouring to ascertain the correct names of Australian birds for my Handlist. By this action I hope to interest my American and Continental friends whose writings I have freely made use of and whose studies of nomenclatorial problems largely exceed my own.

I have not made up these lists with the intention of "upsetting" any names, but with the idea that only strict adherence to the laws will institute stability, and my motto coincides with that of the American Ornithologists' Union, "Zoological Nomenclature is a means, not an end, of Zoological Science." I perhaps differ from that body in some of my methods, but plead that the laws should be observed even when they clash with "general consent" for the time being. I have been much impressed with the total inadequacy of this as a reason for the retention of any name during the course of my investigations, names chosen by that method varying with each generation, obviously incorrect names gaining influence at times through the action of a master-hand accepting them. This was observed so often that I have every confidence that the names here proposed, where accurate, would very soon displace the incorrect ones, now in use, were action to take place at once and only the correct names be used.

In order that no misunderstanding may arise, my general rules have been as follows :---

Non-binomial authors have been ignored.

Nude names have been rejected.

The law of priority has been rigidly observed.

It might be considered superfluons to make the above statements, but 1 have found so much inconsistency, even among authors professing to accept the above, that I have felt compelled to make myself clear on this score. What constitutes a nude generic name seems a moot point. Names unaccompanied by citation of known species and diagnosis have been ignored. In the Amer. O. U. Check List, 3rd Ed. 1910, what may be known as "Oken's names" (Allen, Bull. Amer. Mas. Nat. Hist. vol. xxiv, 1908, p. 26, note) have been accepted. The matter is too intricate to discuss here, but I certainly refuse to recognize them. I only received the latest edition of the Check List when the majority of these notes were drawn up, but have taken advantage of most of the alterations there authorized that relate to the birds which fall under my care.

The following alterations are necessary, the pages and numbers referring to my *Handlist of the Birds of Australia* (1908):--

Page 5: Genus II. Casaarius Latham, Index Ornith. ii. p. 664 (1790)-type C. casuarius

vice Casuarius Brisson.

Casuarius johnsoni F. Mueller replaces C. australis Wall (not Shaw), if the rule "Once a synonym always a synonym " is enforced.

,, 6: Genus III. Megapodius Temminek, Planches Col. pl. 220, August 1823 vice Megapodius Quoy et Gnimard.

, 12: Genus XXX. Euryzona Bonaparte, Compt. Rend. xliii. p. 599 (1856)type Rallus fasciatus Raffles

replaces Rallina anet. (not Rallina Reichenbach).

Reichenbach in Avium Syst. Nat. pl. xx. 1849 figures the head, foot, and wing of a new genus Rallina. In Nov. Synopsis Aviam, No. 5, July 1851, he named 2577 Rallina concolor (Rallus-Gosse, B. of Jam.); 2471-2 Rallina immeculata (Porzana-Gould, Austr. vi. pl. 82); 2477 Rallina plambea (Rallus-us Vieill, nigricans Vieill.).

In 1852 the text to the plates of the *Arium Syst. Nat.* was published, and on p. xxiii was named *Rallina* Reichenbach *maxima* (*Rall—us* Vieill.) R. as the typical species of the genus, and references were included covering the previous entrances of the genus-name.

If we accept maxima as the type of Rallina, then Reichenbach's name falls as an absolute synonym of Aramides Pucheran, Rerue Zool. p. 277 (1845)-type A. cayanea.

If concolor be considered as the type, then Rallina will displace Amaurolinnas Sharpe (Bull. Orn. Club No. 5. p. xxviii, 1893), introduced for that species alone.

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To replace *Rallina* of the *Cat. Birds* xxiii, p. 74 there appears to be only one claimant, *Eurgzona* Bonaparte (*Comptes Rendus* xliii, p. 599, 1856), who introduced it as of Reichenbach, with *fasciata* Raffles as first species and named as type in the *Cat. Birds*, *loc. cit*.

Page 13: Genus XXXVII. Gallinula Tunstall, Ornith. Brit. p. 3 (1771)

viee Gallinula Brisson.

,, " Genns XXXVIII. Porphyrio Bonnaterre, Tabl. Eney. Method. Orn. p. xeiv (1790)

vice Porphyrio Brisson.

" 14: Genus XLI. Podiceps Latham, Suppl. Gen. Syn. i. p. 294 (1787) not Podicipes Lath. (emend.).

British authors generally have used Podiceps for the Grebes, and just as consistently has it been rejected by American writers. The reasons given by the latter can be best understood by a quotation from a very recent paper on this subject. Allen (Ball, Amer. Mus. Nat, Hist. vol. xxiii, p. 289, 1907) stated: "Certain naturalists, more especially the English, have, however, persistently employed Columbus for the Loons and other names for the Grebes, clearly without good reason, possibly following Latham, who, in 1787, proposed Podiceps for the Grebes, and adopted Columbus (Latham nec Linn.) for the Loons"; on p. 290 he added: "Latham's 'Genus LXXIX. Podiceps (Colymbus Linn.)' is a substitute name for Colymbus Linnaeus, and consists of what was left of that group after the Loons were removed from it by Brisson. It is therefore an exact synonym of the restricted genns Colymbus Brisson of the Check List. From the modern point of view, Latham had no right to reintroduce, on a later page, the name Colymbus (Genus LXXXVI. Colymbus Latham) as a new genus for the Loons, after making it a synonym of his own genus Podiceps, to say nothing of Brisson's having separated the Loons from the Grebes as a distinct genus in 1760, or twenty-seven years According to modern usage in other similar cases, Podiceps has no before. standing, being a pure synonym of an earlier genus."

Upon referring to Latham's work I find that the preceding is obviously a misinterpretation of Latham's action.

In the Xth Ed. of the Systema Naturae (p. 135) Linné included four species under his genus Colymbus (Brisson independently introduced Colymbus for the Grebes: he never subdivided a Linnean genus; he used the same names as Linné, often with different significations, as for instance Mergus, which he used for the Divers though Linné had utilized it for the Mergansers). Linné in his XIIth Edition of the Systema Naturae increased the number of species under Colymbus to eleven.

Latham was the first writer to subdivide this genus, and his method was perfectly legitimate, and moreover quite intelligible. He noted tifteen species, but separated the Linnean genus into three, accepting Uria for the Guillemots, restricting Colymbus to the Divers, and introducing Podiceps for the Grebes. As he worked with the Linnean system he indicated in brackets the Linnean genus in the few instances where he made improvements. This is clearly seen as, when including Sylcia (p. 287), Perdix (p. 290), Numenius (p. 291), and Phalaropus (p. 294), he noted against each the Linnean equivalents, Motacilla, Tetrao, Scolopax, and Tringa respectively. But such can by no means be called substitute names, as in each case Latham retained the Linnean names for a restricted portion of the Linnean genus. There can be no appeal whatever from Latham's action, and consequently *Podiceps* must be used for the Grebes. Latham's division was endorsed by such non-English ornithologists as Retzins (1800), Bechstein (1803), Meisner (1804), Koch (1816), Vieillot (1816), Cuvier (1817), Temminck (1820), Lesson (1828), and Kaup (1820), to mention only the first names that come to hand.

In 1829 Kaup (Skizz. Entw.-Gesch, Nat. Syst.) introduced new generic names as follows: on p. 35 he retained Podiceps for the P. minor group; on p. 41 he proposed Dytes for P. cornutus and arcticus; on p. 44 Pedetaithyia for P. subcristatus; on p. 49 Proctopus for P. auritus; and p. 72 Lophaithyia for P. cristatus. Here again, though the names cannot be accepted with full generic rank, the method of restriction being correctly employed no subsequent alterations can be admitted that would depreciate Kaup's division. Hence Podiceps must be used for the Dabchicks and Dytes for the Grebes, the later introduced names being of only subgeneric value.

Page 14: Genus XLII. Dytes Kaup, Skizz. Entw.-Gesch. Nat. Syst. p. 41 (1829) replaces Lophaithyia Kaup, loc. cit. p. 72.

" 15: Genns XLV. Penguinus Brünnich, Zool. Fund p. 78 (1772)-type Phaëthon demersus Linné

replaces Catarractes Brisson.

Penguinus Brüunich.

The consideration of this genus involves a review of the generic names proposed for Penguins between 1758 and 1840. In the Systema Naturae, Xth Ed. 1758, two species of Penguin were included by Linné, and, curiously, the same specific designation was given to each, as they were allotted to different genera, one being called *Diomedex demersa* (p. 132), the other *Phaethon demersus* (p. 135). In Zool. Fund. p. 78, 1772, Brünnich introduced for these two Linneau species two genera, *Penguinus* and *Spheniscus*: though diagnoses are fully given no species are cited; but the names are easily referable, the former agreeing with Linné's *Phaethon demersus*, the latter covering the *Diomedea demersa* Linné.

In 1777 Scopoli, in the Intro. Hist. Nat. p. 472, revived Brisson's Catarractes, correctly citing Linné's Phaëthon demersus as example. Thus Catarractes Scopoli must fall as an absolute synonym of *Penguinus* Brünnich. Scopoli then mentioned *Diomedea*, and quoted as example *Diomedea demersa* L and as synonym *Penguinus* Brünnich. The diagnosis there given and the facts do not agree with these attachments. Scopoli further includes *Spheniscus* Brünnich, but does not give any species, as was natural since he had disposed otherwise of the bird Brünnich indicated. Scopoli gives accurately the essential feature of Brünnich's genus.

In 1778 some plates of birds were drawn by or for J. F. Miller, and two Penguins are included, but whether these were published at that date is quite uncertain. They may therefore be neglected. I note them as publication * would possibly change the authorship of the genus *Aptenodytes* from Forster 1781 to Miller 1778. No other harm would be done.

In 1781 the Penguins were exhaustively dealt with by Forster in the Comment. Götting, iii. pp. 121 et seq., when nine species were enumerated Though previously

* (Boddaert in 1783 quotes some of Miller's plates!)

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two genera had been in use for only two species, Forster includes all his nine species under one generic name, and that a new one, *Aptenodytes*. The first species was separated from the remaining eight, and therefore might be assumed to be either typical or atypical; but, as showing how artificial the separation was, it is now accepted that this first species is identical with one of the other eight.

In 1786 Scopoli, in the *Del. Flor. et Faun. Insub.* vol. ii. p. 91, recorded some Penguins, and, after the fashion of those times, introduced a new generic name, *Apterodita*, and also altered the specific names.

Gmelin in the X111th Edition of the Systema Naturae, 1788, accepted Forster's generic name, which he also spelt Aptenodyta on the same page (p. 555). Forster in the Enchiridion p. 38, 1788, included Aptenodytes. Latham in the Index Ornith. ii. p. 878, 1790, utilized Forster's name, whilst Bonnaterre in the Tabl. Enc. Method. Ornith. p. Ixxxiv and p. 66, 1791, spelt it Aptenodita and Aptenodyta.

In 1793 Shaw (Leverian Maseum p. 144, pl. 35) figured Forster's A. patachonica as the type of a new genus, Pinguinaria.

In 1796 Miller's plates were published "with Descriptions by George Shaw," and though the plates (xxiii, xxxiv, xl, xlix) are lettered as *Aptenodytes* species, the text (pp. 45, 67, 78, and 92) calls them *Pinguinaria* species.

From the preceding it will be seen that no one attempted to classify the Penguins or to subdivide Forster's genus, but simply to replace older names with their own.

Lacépède in 1799 (*Tabl. Oiseaux*, p. 14) had only recognized Aptenodytes, as did Illiger (*Prodromus* p. 285) in 1811. The first author I have discovered to subdivide Aptenodytes is Vieillot (Analyse p. 67, 1816), who indicated a new genus, *Endyptes*, covering two sections, typified by Manchot des Hottentots (= D. demersa Linné) and Santeur, Buffon.

Aptenodytes restricted he exemplified by Apt. papua Gm. Lath. Endyptes is shown to be a misprint on p. 70 for Eudyptes.

Should not A. papua be recognized as the type of Aptenodytes? I do not see how any other species can be chosen.

In 1817 Cuvier (Règne Animal vol. i. p. 512, 1817) divided Aptenodytes into three, restricting Aptenodytes to species like patagonica Gm., and reviving Catarrhactes (ex Brisson) for chrysocoma Gm. and Spheniscus (ex Brisson) for demersa Gm. Therefore Catarrhactes Cuv. equals Pengainus Brünn., and Spheniscus Cuv. is the same as Spheniscus Brünn.

In 1820 Temminek (Man. Ornith. vol. i. pp. exii, exiii, 1820) retained Aptenodytes for the patachonica group and Spheniscus (ex Brisson) for D. demersa Linné, classing therewith A. minor Forster.

In 1826 Stephens (Shaw's Gen. Zool. vol. xiii. pt. 1. pp. 54 et seq.) introduces a further complication, by restricting Aptenodytes to the patagonica species and utilizing Spheniscus for the D. demersa group, and then proposing a new genus, Chrysocoma, for the unallotted species. As his first species of this latter group is chrysocome Forster, by tautonymy it is accepted as type, and hence Chrysocoma becomes an absolute synonym of Pengainus.

Lesson, Manuel d'Ornith. ii. p. 366 (1828), accepted Cuvier's divisions, designating Aptenodytes demersa Gm. as type of Spheniscus Brisson, Cuvier; and A. patagonica Gm. as type of Aptenodytes Forster.

In 1832 Wagler (*Isis* p. 281, 1832) created another new genus, *Pygoscelis*, for the species *Aptenodytes papua* Forster.

This fairly reviews the state of affairs at 1840, when Gray (*List Gen. Birds* p. 77) typified the various genera previously proposed. Omitting all reference to *Penguinus* Brünnich, *Apterodita* Scopoli, or *Chrysocoma* Stephens, he accepted four genera as follows :—

Spheniscus Briss.	Type S. demersus (L.) Temm.
Eudyptes Vieill.	" E. chrysocome (Forster) Vieill.
Pygoscelis Wagl.	" P. papua (Forster) Wagl.
.1 ptenodytes Forster.	" A. patachonica (Forster).

If this action be allowed to overrule Vieillot's disposition, which seems to be a matter for more consideration, we arrive at the following :---

Penguinus Brünnich, 1772. Type Ph. demersus Linné.

The synonymy includes *Catarractes* Scopoli, 1777; *Eudyptes* Vieill., 1816; *Chrysocoma* Stephens, 1826.

· Spheniscus Brünnich, 1772. Type D. demersa Linné.

This is Spheniscus of Brisson and most recent authors.

Aptenodytes Forster, 1781. Type A. patachonica Forster.

As synonyms may be noted Apterodita Scopoli, 1786; Pinguinaria Shaw, 1793.

Pygoscelis Wagler, 1832. Type A. papua Forster.

This arrangement only necessitates the introduction of *Pengainus* Brünnich vice *Catarractes* Brisson into the nomenclature as at present generally accepted. Recognition of Vieillot's separation will incur many other changes, and, if necessary, these must be made at once.

Page 16: Genus Ll. Paffinus Cuvier, Règne Animal p. 516. vol. l. (1817) vice Puffinus Brisson.

" 17: Genns LV. Procellaria Linné, Systema Naturae Xth Ed. p. 131 (1758)type, by designation of Gray, 1840, p. 78, P. aequinoctialis L.

replaces Majaqueus Reichenbach, 1852.

- " 19: Species 114. Diomedea chrysostoma Forster, Mem. Math. Phys. pres. PAcad. Roy. Sci. (Paris) vol. x. p. 571. pl. xiv (1785)
 - replaces D. culminata Gould (the genus Thalassogeron cannot stand).
- " " Species 117. Phoebetria palpebrata Forst., Mem. Math. Phys. pres.

l'Acad. Roy. Sci. (Paris) vol. x. p. 571. pl. xv (1785)

replaces P. cornicoides Hntton (Forster's figure examined).

20: Species 119. Hydrochelidon lencoparcia (Natt. 1820)

- antedates II. hybrida (Pall. 1827), and the Anstralian form must be called II. leucopareia fluxiatilis Gould.
- ", ", Species 120. Gelochelidon macrotarsa Gould for the Australian bird, and G. nilotica Gm. (1789)

replace G. anglica Mont. (1813).

, " Species 121. Hydroprogne caspia Pallas, Noc. Comm. Petrop. vol. xiv. pt. i. 1769-70, p. 582, pl. xxii, fig. 2

vice II. caspia Mont.

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In the Amer. O. U. Check List 3rd Ed. 1910 Thalasseas Boie has been accepted instead of Hydroprogne, but clearly the matter requires reconsideration. I make out the claim of Hydroprogne to stand as follows: Thalasseas was introduced by Boie in the Isis 1822 p. 563 for three species, caspia, cantiaca, and anglica. Kaup in Skizz. Entw.-Gesch. Nat. Syst. 1829 proposed new generic names: on p. 31 Actochelidon for Sterna cantiaca; Hydroprogne on p. 91 for Sterna caspia and aranca (anglica); and on p. 97 gave Thalassaca with Sterna Dougalli as only species. Inasmuch as he thus typified Thalassaca (= Thalassens) by a species not included in the original list his action cannot be accepted.

Brehm in the Isis 1830 p. 994, ignoring Kaup's action, divided Boie's genus into three, restricting Thalasseus to Sterna cantiaca, and inventing Sylochelidon for Sterna caspia and Gelochelidon for Sterna anglica. The following year in the Vogel Deutschlands pp. 767 et seq. Brehm fully described these genera, and absolutely settled the matter as regarding the type of Thalasseus. In 1840 Gray endorsed Brehm's action by selecting cantiaca as type of Thalasseus Boie. At the same time he noted Brehm's Sylochelidon, but did not know of Kaup's work. In 1855 Gray changed the type of Thalasseus to caspia, synonymizing Hydroprogne Kaup, and then accepting Actochelidon Kaup as typified by cantiaca. But there was no valid reason for such alteration, Gray's first action being quite legal, and, considering Brehm's work, the only course open to him. Moreover, Reichenbach in 1852 (Naturl. Syst. Vogel p. v, 1852) indicated cantiaca as the type of Thalasseus.

Page 21: Species 128, Sterna fascata Linué, Syst. Nat. XIIth Ed. p. 228 (1766) replaces Sterna fulginosa Gm. 1788.

" 22: Genus LXXVI. Catharacta Brünnich, Orn. Boreal, 1764. p. 32 replaces Megalestris Bonap. 1856.

The case of *Catharacta* versus *Megalestris* has been argued by J. A. Allen (*Auk* vol. xxi. p. 345, 1904), who decided in favour of the latter. Allen rejected *Catharacta* on account of a prior *Catarractes* of Brisson. As Brisson was a nonbinomial author his name has no standing in scientific nomenclature. Brünnich's first species was *Catharacta skua*; his figured species was *C. ccpphus* = *Larus parasiticus* L. Allen argued that the latter species should be taken as type, but the former was accepted by Linné in the XIIth Ed. *Systema Naturae* as *Larus catarractes*, and hence "by virtual tautonymy" might be regarded as type. However, Gray in 1840 designated *Catarracta skua* as type of *Catarracta*, which genns, as was his wont, he assigned to Ray. I would agree to Gray's action, as by means of it we can preserve *Stercorarius* for the birds typified by *Larus parasiticus* by taking Schaeffer's introduction of that genus. Schaeffer utilized it for *Larus parasiticus* alone, following Linné in referring *catarractes* to *Larus*.

Page 22: Genus LXXVII. Stercorarius Schaeffer, Mus. Ornith. 1789, p. 62 vice Stercorarius Brisson.

- " " " Species 142. St. parasiticus Linné, Syst. Nat. ed. x. p. 136 (1758) replaces St. crepidatus Banks, 1773.
- , 23: Genus LXXVIII. Morinella Meyer und Wolf, Taschenb. d. Vogel p. 383 note (1810)

replaces Arenaria Brisson.

- " 24 : Genns LXXXIII. Squatarola Unvier, Règne Animal i. p. 467 (1817) vice Squatarola Leach.
- " " Species 150. The specific squatarola L. 1758. p. 149

replaces helvetica L. 1766.

" 25 : Genus LXXXVIII. Himantopus Bonnate.re, Tabl. Enc. Meth. Ornith. pp. lxxxii & 24 (1790)

vice Himantopus Brisson.

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Page	26:	Genns XCL Numenius Brünnich, Zool. Fund. p. 76 (1772)
		vice Numenius Brisson.
• 7	۰,	Genns XCIII. Limosa Schaeffer, Mus. Ornith. p. 52 (1789)
		vice Limosa Brisson.
**	,,	Species 167. L. baueri Nanmann, Vogel Deutschl. viii. p. 429 (1836)
		replaces L. novaezealandiae Gray.
"	21:	Genus XCVII. Actitis * Illiger, Prodromus p. 262 (1811)
		replaces Tringoides Bonaparte, 1831.
,,	72	Genus CH. Arenaria Bechst. (not Brisson), Ornith. Taschenb. p. 462A (1803) replaces Calidris Illiger, 1811.
		Species 178. The species name <i>leucophaea</i> Pallas in <i>Vroegs Catal.</i> p. 32.
25	۰,	1764
		replaces arenaria Linné, 1766.
	98.	Genus CIII. The reference given here is incorrect: it should read
"	~ • •	Lönnberg, J. f. O. 1906, pp. 531-3.
"	, ,	Genus UV. Erolia Vieillot, Analyse p. 55 (1816)
"	,,	replaces Ancylochcilus Kaup, 1829.
,,	,,	Species 182. The species name ferruginea Brünnich, Orn. Boreal. p. 53
		(1764)
		antedates <i>subarquatus</i> Güldenst.
,,	,,	Genus CVII. Gallinago Koch, Die Säugthiere p. 312 (1816)
		vice Gallinago Leach.
"	29:	Genus CX1. Trachelia Scopoli, Annus I, Hist. Nat. p. 110 (1769)
		replaces Glareola Brisson.
>>	30 :	Genns CXVI. Ibis Lacepede, Tabl. Oiseaux p. 18 (1799)
		vice Ibis Cuvier, 1817.
"	"	Antigone rabicunda Perry, Arcana, June 1810
	91.	antedates A. anstralasiana (Gould). Genus CXVIII, Egatheus Billberg, Syn. Faunae Seand, i. p. 166 (1828)
"	913	replaces Plegadis Kanp.
	39.4	Genus CXXVI. Egretta Forster, Syn. Cat. Brit. Birds p. 59 (1817)
"	0~ .	replaces Garzetta Kanp, 1829.
"	33:	Genus CXXVIII. Nyeticorax Forster, Syn. Cat. Brit. Birds p. 59 (1817)
<i>"</i>		vice Nycticorax Rafinesque.
"	"	Genns CXXX. Leobrychus Billberg, Syn. Faunae Scand. i. p. 166 (1828)
		replaces Ardetta Gray, 1842.
,,	,,	Genus CXXXII. Botaurus Stephens, in Shaw's General Zoology vol. xi.
		part ii. p. 592 (1819)
		vice Botaurus Brisson.
"	36 :	Genus CXLVII. Nyroca Fleming, Philos. Zool. ii. p. 260 (1822)
	0.*	replaces Aythya Boie (preoccupied).†
,,	37:	Genus CL. Carbo Lacépède, Tableau Oiseaux p. 15 (1799)
		replaces Phalacrocorax of Brisson.
*	.1ctiti.	s Illiger (Prodramus p. 262, 1811) was introduced for a number of species, one of which was

hypolences L. In the Isis p. 560, 1822, Boie only included this a number of species, one of which was hypolences L. In the Isis p. 560, 1822, Boie only included this appelence and ender Actitis, placing the other members of Illiger's genus in other genera. Consequently this can be considered as restriction, and thus hypolences becomes the type of Actitis Illiger. Bonaparte in the Giornale Arcadi o vol. lii. p. 57, 1831, proposed Tringoides as a substitute for "Actitis Boie nec Ill." As Boie's genus was part of Illiger's 1 do not accept Bonaparte's name.

† Cf. Diapiez, Dict. Class. d'Hist. Nat. i. p. 128 (1822), and Stone, Auk 1907, p. 190,

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Page 38 : Genus CLH. Sala Scopoli, Intro. Hist. Nat. p. 474 (1777) vice Sala Brisson.

- " " Genns CLIII. Fregata Lacépède, Tableau Oiseaux p. 15 (1799) vice Fregata Brisson.
- ., 40 : Genus CLVIII. Nisus Lacépède, Tableau Oiseaux p. 4 (1799) replaces Accipiter Brisson.

There need be no sentiment with regard to the rejection of Accipiter. Brisson introduced two genera for the Falconidae, viz. Aquila and Accipiter, whilst Linné classed all under Falco. Inasmuch as Brisson did not recognize Linné's genus, his names cannot be accepted as constituting a subdivision of the Linnean genus. The first use I have traced of Accipiter in binomial nomenclature is that of S. G. Ginelin in the Nov. Comm. Acad. Petrop. vol. xv. p. 439, 1771, when three species are named, none of which are referable to Accipiter (anet.). The first disintegration of the Linnean Falco was made by Lacépède, who divided it into seven genera-Aquila, Astur, Nisus, Buteo, Circus, Milrus, and Falco : these genera had previously been many times indicated as sections but no sectional names correctly introduced. The researches of Mr. C. Davies Sherborn have proved the valid introduction of these names in 1799, and as species were added almost immediately (Natural Science, p. 406, 1899), there can be no disputing the acceptability of Lacepede's divisions. Circus and Astur are already commonly recognized as of Lacépède, as noted in my Handlist, p. 39, Genera CLVI, and CLVII.

Page 44: Genus CLXXV. Tyto Billberg, Syn. Faunae Scand. i. tab. A (1828) replaces Strix (auctorum, non Linné 1758!)

In the Amer. O. U. Check List, 3rd Ed. 1910, Alaco Fleming, 1822, is chosen to replace the name Strix now generally in use for the Barn Owls. That name, however, is preoccapied by Link, Besch. Naturl. Samml. p. 130 (1807), for a genus of Molluses! The next name in order appears to be Tyto of Billberg as given above. Billberg, in 1820, had previously proposed Tyta for a genus of Insects, so that some may consider the name Tyto preoccupied. In that case Hybris Nitzsch (Syst. Pteryl. p. 100, 1840) would have a claim.

Page 47: Licmetis tennirostris Kuhl, Consp. Psitt. p. 88 (1820) replaces L. nasica Temminck.

- " 48: Polytelis anthopeplus Vigors in Lear's Mon. Psitt. pt. 8, October 1, 1831 replaces P. melanura id., ib. pt. 12, 1832.
- 29 49: Platycercus browni Knhl, Consp. Psitt. p. 56 (1820) replaces P. flaviventris Temminek.
- ", Platycercus venustus Kuhl, Consp. Psitt. p. 52 (1820) replaces P. browni Temminek.
- " 51 : Neophema chrysostoma Knhl, Consp. Psitt. p. 50 (1820) replaces N. venusta Temminck.
- " 56: Genus CCXIII. Collocalia Gray, List Genera Birds p. 8 (1840) replaces "Salangana Thumb."
 - (Cf. Richmond, Proc. U. S. Nat. Mas. xxxv. p. 640, 1908.)
- " " Genus CCXV. Apus Scopoli, Intro. Hist. Nat. p. 483 (1777) replaces Cypselus Illiger, 1811.

If Apus Scopoli be considered preoccupied by Apos, introduced earlier in the

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same work by the same writer, then *Micropus* Meyer und Wolf (1810) still antedates *Cypsclus* Illiger, 1811.

Page 60: Genus CCXXVI. Chelidon, Forster, Syn. Cat. Brit. Birds p. 17 (1817) replaces Hirundo (auct.).

" 75 : Acanthira archibaldi

, 102 : Munia flaviprymna

replaces M. xanthoprymnu.

,, 103 : Poëphila atropygialis

replaces P. nigrotecta.

The following list contains names which appear to be first introduced into binomial nomenclature at the place given, and I am recording them for the sake of criticism.

Brünnich in the Zool. Fund., 1772, gave diagnoses of some ninety-two genera, and hence many "Brissonian genera" can be utilized as of this place, as Brünnich mainly followed Brisson. Scopoli, in the Intro. Hist. Nat. 1777, also noted some ninety-two names, but he used side by side the different names given by Brisson and Linné to similar groups, so that a disturbing factor is here met with. Schaeffer, in the Elem. Ornith. Icon. 1774, and 2nd Ed. 1779, reproduced the Brissonian classification, but in these works he was not binomial; in the Mas. Ornithol. 1789 he still followed the Brissonian scheme but adopted binomiality; he applied the system most consistently, as out of two hundred and twenty-ning species recorded, in only seven instances are other than binomials used. This work must therefore be accepted, and through it other Brissonian names gain a valid introduction. A few other Brissonian generic names were binominally used by such writers as Pallas, S. G. Gmelin, Boddaert, etc., and as a consequence few of the "Brissonian genera" need alteration save as to the anthority.

Anser Pallas, Spic. Zool. (6) p. 21 (1769) vice Anser Brisson. Aquila S. G. Gmelin, Nov. Comm. Petrop. vol. xv. p. 445 (1771) vice Aquila Brisson. Asio Schaeffer, Mus. Ornith. p. 10 (1789) vice Asio Brisson. Carduelis Schaeffer, Mus. Ornith. p. 23 (1789) vice Carduelis Brisson. This name also antedates Acanthis Borkhausen, 1797. Ciconia Brünn., Zool. Fund. p. 74 (1772) vice Ciconia Brisson. Coccothraustes Schaeffer, Mus. Ornith. p. 28 (1789) vice Coccothraustes Brisson. Colius Brünn., Zool. Fund. p. 90 (1772) vice Colius Brisson. Corriva Brünn., Zool. Fund. p. 72 (1772) vice Corrira Brisson. Cotinga Boddaert, Tabl. Pl. enlum. p. 14 (1783) vice Cotinga Brisson. Currirostra Scopoli, Intro. Hist. Nat. p. 480 (1777) appears to have a prior right to Loxia Linn. (auct.).

replaces .1. magnirostris Campbell (not Gould).

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In the place quoted Scopoli separated Loxia curvirostra L, with the generic appellation above given. As he retained Loxia (p. 483) for the other species his action seemed unassailable. In the Ball, Amer. Mus. Nat. Hist. vol. xxiii, p. 356, 1907, Allen wrote: "Type (of Loxia) by restriction Loxia curvirostra, the first species." In the next volume (p. 36), recognizing his error, he claimed it as designated by Gray, 1840, and it is thus accepted in the Amer. O. U. Check List 1910. Allen, however, noted "Brehm (1827) had founded Curvirostra for the Crossbills, of which L. curvirostra is type by tautonymy." Scopoli's fifty-year-prior introduction, legitimately made, seems to nullify all later action with regard to the fixation of L. curvirostra as type of Loxia. As a matter of historical interest, Daudin, Traité d'Ornith, ii. p. 355 (1800), and Forster, Syn. Cat. Brit. B p. 10 (1817), had both correctly proposed Crucirostra for the Crossbills prior to Brehm's Curvirostra (1827). There appears to be no other course legally open save the recognition of Scopoli's genus for the group of Loxia curvirostra Linné.*

Fratercula Schaeffer, Mas. Ornith. p. 61 (1789) vice Fratercula Brisson,

Garrulus Schaeffer, Mus. Ornith. p. 14 (1789) vice Garrulus Brisson.

Gelochelidon nilotica Gm., Syst. Nat. i. p. 605 (1789) replaces G. anglica Mont. (1813).

Lagopus Schaeffer, Mus. Ornith. p. 2 (1789) vice Lagopus Brisson.

Manacus Pallas, Spic. Zool. (6) p. 21 (1769) vice Manacus Brisson.

Momotus Brünnich, Zool. Fund. p. 84 (1772) vice Momotus Brisson.

Nucifraga Schaeffer, Mus. Ornith. p. 14 (1789)

vice Nucifraga Brisson.

Megalornis Gray, List Genera of Birds 2nd Ed. p. 85 (1841) must replace Gras (auct.), not of Pallas 1766.

In the Amer. O. U. Check List 3rd Ed. 1910, Grus has been daringly retained as of Pallas 1766, and the type is given as, by tautonymy, Ardea grus Linné. If this can be recognized, why should there have been any discussion regarding Strize Linné, 1758, and its type? As shown by Allen himself, Bull. Amer. Mus. Nat. Hist. xxiii. p. 313, 1907, Grus Pallas, 1766, is an absolute synonym of Psophia Linné, 1758. Pallas in Misc. Zool. p. 66, 1766, introduced Grus with relation to Psophia crepitans L. : in Spic. Zool. (4) p. 1, 1767, he again referred to it in the same connection. In 1773 Pallas (Reise Prov. Russ. Reichs ii. p. 714) introduced a new species of Grus, which is now the type of Leucogeranus.

Gray recognized the truth in 1841, and correctly synonymizing *Gras* Pallas with *Psophia* Linné, proposed *Megalornis* for the species typified by *Ardea gras* Linné.

* This note of Mr. Mathews is of interest as it brings to light Scopoli's name Curvirostra 1777. If the method of elimination alone is used, Curvirostra must indeed replace Loxia auctorum. Mr. Mathews is quite right in saying that Curvirostra of Forster and Cuvier is older than Curvirostra of Brehm, and that all these antedate Gray's designation of 1840. On the other hand, L. currirostra is the type of Loxia by the rule of tautonymy, the name of the genus being like the synonym of one of its species and evidently based upon that name.—If this course is followed here, terrible confusion will be avoided. I cannot, however, agree that "general consent," as Dr. Allen says (Bull. Amer. Mus. xxiii, p. 356), has anything to do with our decision.—E. II. (503)

Passer Schaeffer, Mus. Ornith, p. 24 (1789) vice Passer Brisson. Perdix S. G. Gmelin, Nov. Comm. Acad. Petrop. xv. p. 448 (1771) vice Perdix Brisson. Phalaropus Brünnich, Zool, Fund, p. 72 (1772) vice Phalaropus Brisson, Pica Schaeffer, Mas. Ornith. p. 13 (1789) vice Pica Brisson. Pyrrhula Schaeffer, Mus. Ornith. p. 30 (1789) vice Purrhula Brisson. Spheniscus Brünnich, Zool, Fund. p. 78 (1772) vice Spheniscus Brisson. Scops Brünnich, Zool, Fund. p. 74 (1772) vice Scopus Brisson. Thalasseus Boie, Isis p. 563 (1822) replaces Actochelidon Kaup, 1829. Turtur Boddaert, Tabl, Planches Enlum, p. 10 (1783) replaces Chalcopelia Bonap., 1857. and Streptopelia Bonap., Consp. Ar. ii, p. 63 (1857) replaces Turtur Selby, 1835, not Boddaert 1783.

At the place quoted Boddaert gives the following: "Pl. 160. Tourterelle du Sénégal. Buff. vi. p. 394. Briss., Ornith. i. p. 122. pl. x. fig. 1. Turtur afra Linn. 104. 34."

Linne's Columba afra was founded npon Brisson's bird. The acceptance of Boddaert's work necessitates the above alterations.

Uria Brünnich, Orn. Boreal, p. 27 (1764)
vice Uria Brisson.
Vanellas Schaeffer, Mas. Ornith. p. 49 (1789)
vice Vanellus Brisson.
Vaginalis Gmelin, Syst. Nat. XH1th Ed. vol. i. p. 705 (1788)

should replace Chionis Forster, 1788.

This is a most enrious instance of perversity in the choice of generic names. Forster in the *Enchiridion* 1788 gave diagnoses of genera only: eighty-one names in all, of which only three were new. Of even date Gmelin proposed new generic names for two of these, with good definitions and species cited. Legally both of Gmelin's genera have priority, but one has been accepted, the other rejected, though the conditions are absolutely identical in each case. Moreover, in this case there is a prior *Chion* (Scopoli, *Intro. Hist. Nat.* p. 398, 1777), which may be considered by some anthorities to preoecupy *Chionis*.

1 am indebted to Mr. Tom Iredale for much help with the foregoing work.